



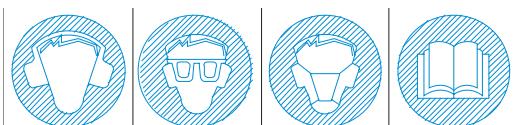
C025 HYDRAULIC CUT-OFF SAW



⚠ WARNING

SERIOUS INJURY OR DEATH
COULD RESULT FROM IM-
PROPER REPAIR OR SERVICE
OF THIS TOOL.

REPAIRS AND/OR SERVICE
TO THIS TOOL MUST ONLY
BE DONE BY AN AUTHORIZED
AND CERTIFIED DEALER.



SAFETY, OPERATION AND MAINTENANCE SERVICE MANUAL



Copyright® The Stanley Works 2005
OPS/SVCE USA
Printed in U.S.A.
34956 8/2005 ver 2

Stanley Hydraulic Tools
3810 SE Naef Road
Milwaukie OR 97267-5698
503-659-5660
FAX 503-652-1780
www.stanley-hydraulic-tools.com

SERVICING THE STANLEY HYDRAULIC Cutoff Saw: This manual contains safety, operation, and routine maintenance instructions. Servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.

⚠ WARNING

SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS TOOL.

REPAIRS AND / OR SERVICE TO THIS TOOL MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.

For the nearest authorized and certified dealer, call Stanley Hydraulic Tools at the number listed on the back of this manual and ask for a Customer Service Representative.

TABLE OF CONTENTS

CERTIFICATE OF CONFORMITY.....	4
SAFETY SYMBOLS.....	5
SAFETY PRECAUTIONS	6
TOOL STICKERS & TAGS	8
HYDRAULIC HOSE REQUIREMENTS	9
HTMA REQUIREMENTS	10
OPERATION	11
PREOPERATION PROCEDURES.....	11
CHECK THE POWER SOURCE.....	11
CHECK THE TOOL	11
CHECK TRIGGER MECHANISM	11
CONNECT HOSES	11
TOOL OPERATION.....	11
STARTUP	11
GENERAL OPERATION	12
WET CUTTING	12
BROKEN CUT-OFF WHEELS	12
SHUTDOWN	12
PERIODIC MAINTENANCE.....	13
THRUST COLLAR AND INSIDE/OUTSIDE COLLAR INSPECTION.....	13
DRIVE-SHAFT SPEED CHECK.....	13
BEARING CHECK.....	13
CARE AND STORAGE	13
CUTOFF WHEELS.....	13
TOOL.....	13
CUTOFF WHEEL REPLACEMENT	14
COLD WEATHER OPERATION.....	14
EQUIPMENT PROTECTION & CARE.....	15
TROUBLESHOOTING.....	16
SPECIFICATIONS	17
ACCESSORIES	17
SERVICE	18
CO25 PARTS ILLUSTRATION	25
CO25 PARTS LIST	26
WARRANTY.....	27

**CERTIFICATE OF CONFORMITY
ÜBEREINSTIMMUNGS-ZERTIFIKAT
CERTIFICAT DE CONFORMITE CEE
CERTIFICADO DE CONFORMIDAD
CERTIFICATO DI CONFORMITA**



I, the undersigned:
Ich, der Unterzeichnende:
Je soussigné:
El abajo firmante:
Io sottoscritto:

Schultz, Theodore J.

Surname and First names/Familienname und Vornamen/Nom et prénom/Nombre y apellido/Cognome e nome

hereby certify that the construction plant or equipment specified hereunder:
bestätige hiermit, daß das im folgenden genannten Werk oder Gerät:
certifies par ceci que l' usine ou l' équipement de construction indiqué cidessous:
por el presente certifico que la fabrica o el equipo especificado a continuacion:
certifico che l'impianto o l'attrezzatura sotto specificata:

1. Category: **Cut-Off Saw**

Kategorie:

Catégorie:

Categoría:

Categoria:

2. Make/Ausführung/Marque/Marca/Marca **Stanley**

3. Type/Typ/Type/Tipo/Tipo: **CO2554101, CO2514101**

4. Serial number of equipment:

Seriennummer des Geräts:

Numéro de série de l'équipement:

Número de serie del equipo:

Matricola dell'attrezzatura:

All

5. Year of manufacture/Baujahr/année de fabrication/Año de fabricacion/Anno di fabbricazione **1998**

Has been manufactured in conformity with - EEC Type examination as shown.

Wurde hergestellt in Übereinstimmung mit - EEC Typ-Prüfung nach.

Est fabriqué conformément - au(x) type(s) examiné(s) comme indiqué dans le tableau ci-après.

Ha sido fabricado de acuerdo con - tipo examen EEC como dice.

E' stata costruita in conformità con - le norme CEE come illustrato.

Examen CEE de type					
Directive Richtlinie Directives particulières Directriz Direttiva	No. Nr Numéro No n.	Date Datum Date Fecha Data	Approved body Prüfung durch Organisme agréé Aprobado Collaudato	Date of expiry Ablaufdatum Date d'expiration Fecha de caducidad Data di scadenza	
Machinery Directive EN EN ISO ISO	98/37/EC 1454 792-7 3744 8662-1	1998 1997 2001 1994 1988	Self Self Self Self Self	NA NA NA NA NA	

6. Special Provisions: **None**
Spezielle Bestimmungen:
Dispositions particulières:
Provisiones especiales:
Disposizioni speciali:

Done at/Ort/Fait à/Dado en/Fatto a Stanley Hydraulic Tools, Milwaukie, Oregon USA Date/Datum/le/Fecha/Data **3/98**

Signature/Unterschrift/Signature/Firma/Firma

Position/Position/Fonction/Puesto/Posizione **Engineering Manager**

SAFETY SYMBOLS

Safety symbols and signal words, as shown below, are used to emphasize all operator, maintenance and repair actions which, if not strictly followed, could result in a life-threatening situation, bodily injury or damage to equipment.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



This safety alert and signal word indicate an imminently hazardous situation which, if not avoided, will result in death or serious injury.



This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, could result in death or serious injury.



This safety alert and signal word indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



This signal word indicates a potentially hazardous situation which, if not avoided, may result in property damage.



This signal word indicates a situation which, if not avoided, will result in damage to the equipment.



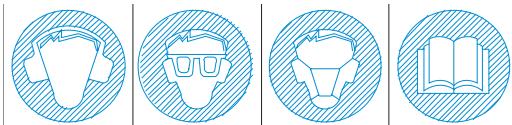
This signal word indicates a situation which, if not avoided, may result in damage to the equipment.

Always observe safety symbols. They are included for your safety and for the protection of the tool.

LOCAL SAFETY REGULATIONS

Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

SAFETY PRECAUTIONS



Tool operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the tool and hose.

These safety precautions are given for your safety. Review them carefully before operating the tool and before performing general maintenance or repairs.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided on page 5.

The CO25 Hydraulic Cut-Off Saw will provide safe and dependable service

if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and hose before operation. Failure to do so could result in personal injury or equipment damage.

- The operator must start in a work area without bystanders. Flying debris can cause serious injury.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor. Establish a training program for all operators to ensure safe operation.
- Always wear safety equipment such as goggles, ear, breathing and head protection, and safety shoes at all times when operating the tool. Use gloves and aprons when necessary.
- The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Maintain proper footing and balance at all times. Always hold the tool with both hands when the unit is running. Use a firm grip.
- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Always connect hoses to the tool hose couplers before energizing the hydraulic power source. Be sure all hose connections are tight and are in good condition.
- Do not operate the tool at oil temperatures above 140°F/60°C. Operation at higher temperatures can cause higher than normal temperatures at the tool which can result in operator discomfort.
- Do not operate a damaged, improperly adjusted, or incompletely assembled tools.
- Never wear loose clothing that can get entangled in the working parts of the tool.
- Keep all parts of your body away from the rotating parts. Long hair or loose clothing can become drawn into rotating components.
- Always use accessories that conform to the specifications given in this manual.
- Release the trigger if the power supply has been interrupted.
- When working near electrical conductors, always assume that all conductors are energized and that insulation, clothing and hoses can conduct electricity. Use hose labeled and certified as non-conductive.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.

SAFETY PRECAUTIONS

- Never carry the tool or put it down while the wheel is rotating. Make sure it is completely stopped before moving your position or set the tool down.
- Do not operate the tool with the wheel guard removed.
- Keep the handles dry, clean and free of oil at all times.
- Operate the tool in well ventilated areas only.
- Do not operate the tool if the wheel does not stop when the trigger is released.
- Inspect the wheel guard and collars for damage after any wheel breakage on the tool.
- Always use full throttle when cutting.
- Never cock, jam or wedge the wheel during the cut. Do not use the side of the wheel as a cutting surface.
- Make sure the tool is designed for the wheel direction suitable for the job. Do not reverse the direction of the wheel rotation by changing the direction of the oil flow.
- Always operate the tool within its rated capacity. Never exceed the maximum operating speed marked on the wheel.
- Do not operate the tool near flammable materials.
- Do not over-reach.
- Do not use the tool for applications for which it was not designed.
- Keep the wheel off all surfaces when starting the saw.
- Do not attempt to adjust the flow control on the valve handle.
- Know the location of buried or covered services before starting work.
- Adjust the wheel guard so it is between you and the cutting wheel.
- Never operate the tool when you are tired.

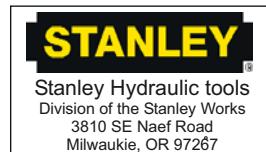
CUT-OFF WHEEL SAFETY

- Always inspect the cut-off wheels for possible damage before operating the tool. do not use a wheel that is cracked or otherwise damaged.
- Never transport or store the tool with the cut-off wheel mounted on the saw.
- If the cut-off saw is dropped with a cutting wheel installed, thoroughly examine the cutting wheel before use.
- Make sure the cutting wheel is correctly mounted and tightened before use.
- Operate the cut-off saw at no load for 30 seconds in a safe position. If considerable vibration or other defects are detected, stop operation of the tool immediately and determine the cause. Do not use the tool until the defect is corrected.
- Only use cutting wheels that comply with ANSI B7.5/ISO 525, 603.
- Check that the maximum operating speed of the cutting wheel is equal to or greater than the rated shaft speed of the cut-off saw. Wheels must be rated at 4500 rpm minimum.

TOOL STICKERS & TAGS



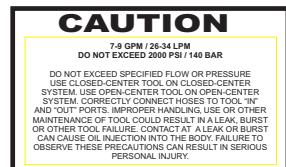
28886
COMPOSITE DECAL
(CE MODELS ONLY)



05152
ADDRESS DECAL



33206
CO25 NAME TAG



03786
GPM DECAL



CAUTION

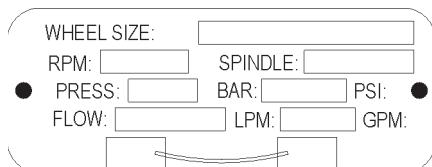
PROTECT YOUR EYES - WEAR SAFETY GOGGLES

1. Do not use damaged wheels.
2. Use full throttle only while cutting.
3. Use only wheels marked high speed reinforced that meet requirements of ANSI B7.5. Wheels should be no larger than 16" diameter x 5/31" thick with a 1" arbor hole and rated for 4700 rpm minimum speed.
4. Inspect wheel guard & collars for damage after any wheel breakage on the machine.
5. Maximum spindle speed is 4700 rpm.

05868
SAFETY LABEL



52539
SOUND POWER DECAL
(CE MODELS ONLY)



28811
INFORMATION PLAQUE
(CE MODELS ONLY)



11207
CIRCUIT TYPE D DECAL
(CE MODELS ONLY)



05153
STANLEY ADDRESS DECAL
(CE MODELS ONLY)



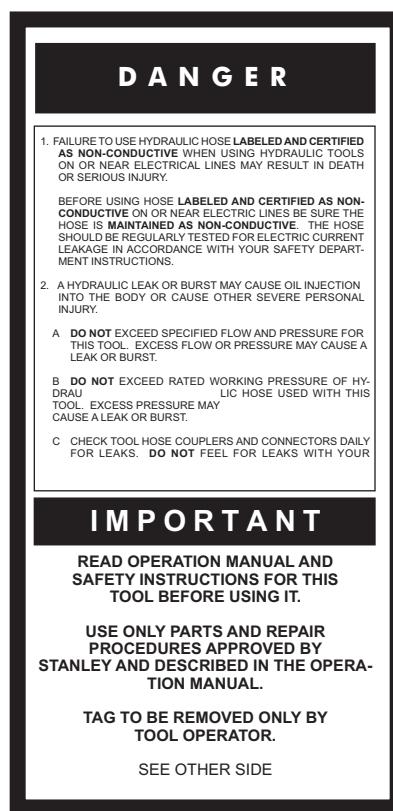
28322
CE DECAL
(CE MODELS ONLY)

NOTE

THE INFORMATION LISTED ON THE STICKERS SHOWN, MUST BE LEGIBLE AT ALL TIMES.

REPLACE DECALS IF THEY BECOME WORN OR DAMAGED. REPLACEMENTS ARE AVAILABLE FROM YOUR LOCAL STANLEY DISTRIBUTOR.

The safety tag (p/n 15875) at right is attached to the tool when shipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag and attach it to the tool when not in use.



SAFETY TAG P/N 15875 (shown smaller than actual size)



HYDRAULIC HOSE REQUIREMENTS

HOSE TYPES

Hydraulic hose types authorized for use with Stanley Hydraulic Tools are as follows:

- ① Certified non-conductive
- ② Wire-braided (conductive)
- ③ Fabric-braided (not certified or labeled non-conductive)

Hose ① listed above is the only hose authorized for use near electrical conductors.

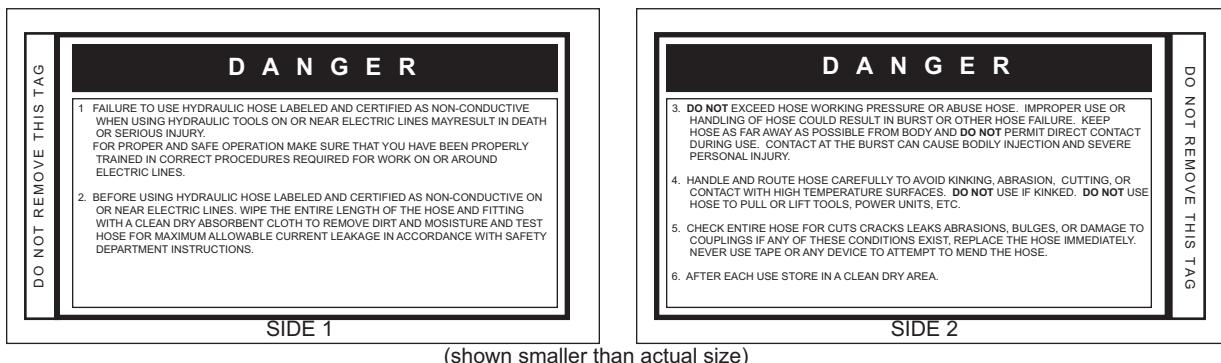
Hoses ② and ③ listed above are **conductive** and **must never** be used near electrical conductors.

HOSE SAFETY TAGS

To help ensure your safety, the following DANGER tags are attached to all hose purchased from Stanley Hydraulic Tools. DO NOT REMOVE THESE TAGS.

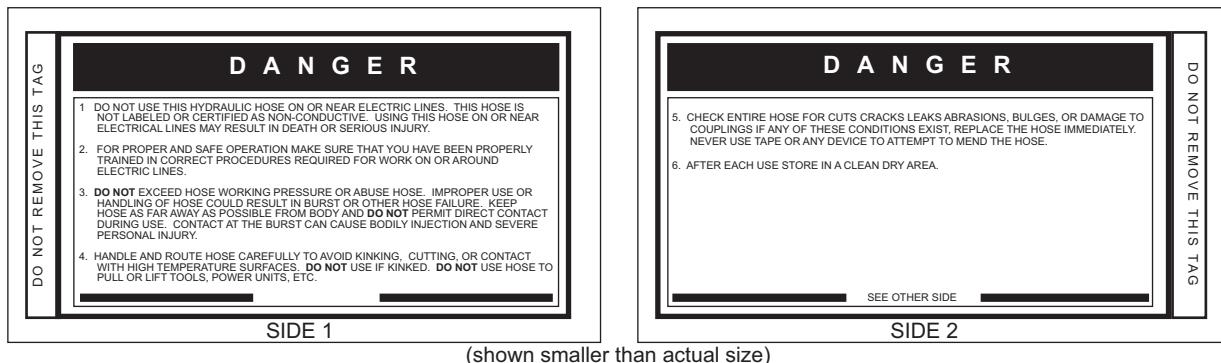
If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained from your Stanley Distributor.

THE TAG SHOWN BELOW IS ATTACHED TO "CERTIFIED NON-CONDUCTIVE" HOSE



(shown smaller than actual size)

THE TAG SHOWN BELOW IS ATTACHED TO "CONDUCTIVE" HOSE.



(shown smaller than actual size)

HOSE PRESSURE RATING

The rated working pressure of the hydraulic hose **must be equal to or higher than** the relief valve setting on the hydraulic system.

HTMA REQUIREMENTS

HYDRAULIC SYSTEM REQUIREMENTS



TYPE 1



TYPE II

TYPE III

TYPE RR

FLOW RATE	4-6 gpm (15-23 lpm)	7-9 gpm (26-34 lpm)	11-13 gpm (42-49 lpm)	9-10.5 gpm (34-40 lpm)
TOOL OPERATING PRESSURE (at the power supply outlet)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)
SYSTEM RELIEF VALVE SETTING (at the power supply outlet)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2200-2300 psi (152-159 bar)
MAXIMUM BACK PRESSURE (at tool end of the return hose)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)
Measured at a max. fluid viscosity of: (at min. operating temperature)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)
TEMPERATURE Sufficient heat rejection capacity to limit max. fluid temperature to: (at max. expected ambient temperature)	140° F (60° C)	140° F (60° C)	140° F (60° C)	140° F (60° C)
Min. cooling capacity at a temperature difference of between ambient and fluid temps	3 hp (2.24 kW) 40° F (22° C)	5 hp (3.73 kW) 40° F (22° C)	7 hp (4.47 kW) 40° F (22° C)	6 hp (5.22 kW) 40° F (22° C)
NOTE: Do not operate the tool at oil temperatures above 140° F (60° C). Operation at higher temperatures can cause operator discomfort at the tool.				
FILTER Min. full-flow filtration Sized for flow of at least: (For cold temp. startup and max. dirt-holding capacity)	25 microns 30 gpm (114 lpm)			
HYDRAULIC FLUID Petroleum based (premium grade, anti-wear, non-conductive)	100-400 ssu* (20-82 centistokes)	100-400 ssu* (20-82 centistokes)	100-400 ssu* (20-82 centistokes)	100-400 ssu* (20-82 centistokes)
VISCOSITY (at min. and max. operating temps)				
NOTE: When choosing hydraulic fluid, the expected oil temperature extremes that will be experienced in service determine the most suitable temperature viscosity characteristics. Hydraulic fluids with a viscosity index over 140 will meet the requirements over a wide range of operating temperatures.				

*SSU = Saybolt Seconds Universal

NOTE:

These are general hydraulic system requirements. See tool Specification page for tool specific requirements.

OPERATION

PREOPERATION PROCEDURES

CHECK THE POWER SOURCE

Careful inspection of the tool and hydraulic system before startup is important for safe, reliable operation of the tool.

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 7–9 gpm (26–34 lpm) at 2000 psi (140 bar).
2. Make certain the hydraulic power source is equipped with a relief valve set to open at 2100–2250 psi (145–155 bar).

CHECK THE TOOL

The following items should be checked daily.

Make sure the hydraulic system control valve is in the “OFF” position and the hoses are disconnected before inspecting the cutoff saw.

1. Inspect the cut-off wheel and guard. Make sure the correct cut-off wheel is installed for the job. If not, follow the instructions for Cut-off Wheel Replacement section of this manual.
2. Inspect the wheel for chips, cracks, or other damage. For maximum tool performance, replace the wheel if it is worn or defective.
3. Inspect the wheel guard for cracks or other structural damage.
4. There should be no signs of leaks.
5. Inspect the handlebar. Make sure the handlebar is securely fastened to the cutoff saw and is clean of any oil to ensure a firm grip.

IMPORTANT

Check the speed of the motor output shaft after every 100 hours of operation.

CHECK TRIGGER MECHANISM

1. Inspect the trigger and safety catch. Make sure the trigger operates smoothly and is free to travel between the “ON” and “OFF” positions.
2. Make sure the trigger is set to disengage the cut-off saw when released.

3. Check that the safety catch on the handle assembly is operating properly. It should prevent engagement of the trigger unless the catch is pressed down fully in the handle slot.

CONNECT HOSES

1. Wipe all hose couplers with a clean, lint-free cloth before making connections.
2. Connect hoses from the hydraulic power source to the tool fittings or quick disconnects. It is good practice to connect the return hose first and disconnect it last to minimize or eliminate trapped pressure within the wrench.
3. Observe the flow indicators stamped on the valve handle assembly and the hose couplers to ensure that the flow is in the proper directions. The female couple on the tools “IN” port is the inlet (pressure) coupler.

Note:

If the uncoupled hoses are left in the sun, pressure increase within the hoses can make them difficult to connect. Whenever possible, connect the free ends of hoses together.

TOOL OPERATION

STARTUP

1. Move the hydraulic system control valve to the “ON” position.
2. At the beginning of each shift, or after a new wheel is installed, run the cut-off saw at operating speed for at least one minute before starting work.

HANDHELD CONFIGURATION:

1. Press the safety catch into the handle, then slowly squeeze the trigger.
2. Run the saw at least one minute.
3. Release the trigger and safety catch.

MOUNTED CONFIGURATION (SAW CART):

1. Make sure the lower edge of the cutoff wheel is at least 1 inch above the work surface.
2. Slowly squeeze the hand control lever.
3. Run the saw at least one minute, then release the control lever.

OPERATION

If excessive vibration or any other defect is detected, stop the tool immediately and determine the cause. Do not use the tool until the problem is corrected.

GENERAL OPERATION

HANDHELD CONFIGURATION:

1. Whenever possible, clamp or hold down the work and support it securely on both sides of the cut.
2. Press the safety catch into the handle, then slowly squeeze the trigger.
3. Start the cut with the wheel rotating. Start the work gently with consistent pressure. Do not bump the saw into the workpiece.
4. Feed the wheel through the material as fast as possible without slowing the wheel rotation speed.

Cutting through the material too slowly causes heat expansion and can result in wheel "pinching" in the material. This is one of the most common causes of wheel breakage.

MOUNTED CONFIGURATION (SAW CART):

When the cutoff saw is mounted on a saw cart, always use a motor-type hydraulic system control valve to turn the saw "ON" and "OFF". All ports must be connected to the tank (hydraulic system reservoir) when the control valve is in neutral. Alternatively, use a direct line from the tool outlet to the tank.

IMPORTANT

Keep all four wheels of the cart on the cutting surface at all times. Do not tip the front of the cart up during operation or while the blade is in motion.

1. Align the cut line indicator on the line to be cut.
2. Lower the blade to approximately 1/2 to 1-inch above the cutting surface. Set the depth gauge to ensure accurate cutting depth.
3. Make sure the water hose and its connections are secure and there is a steady flow of coolant water.
4. Slowly squeeze the hand control lever.
5. Slowly and safely lower the rotating blade into the cutting surface to the desired depth:

Increase the depth by turning the depth-control crank counterclockwise (CCW).

Periodically look at the depth gauge and pointer to check the actual depth of the cutting blade.

6. Move slowly and safely forward along the cutting line until the desired cut is complete. The safe forward rate depends on your blade type.
7. Release the hand control lever.
8. To raise the blade from the cutting surface, wait until the blade comes to a complete stop in the work material.

Turn the depth-control crank clockwise (CW) until the blade clears the surface.

WET CUTTING

1. Make sure the cutting wheel is suitable for wet cutting.
2. When shutting down a wet-cutting operation:
 - a. Stop the tool.
 - b. Shut off the water.

Restart the tool and allow the wheel to spin off the excess water.

BROKEN CUT-OFF WHEELS

Cut-off wheels designed for use with portable saws are extremely tough. When used as directed, they are difficult to break during normal use.

If a wheel breaks while operating the cut-off saw, investigate the cause of the failure and correct the problem as soon as possible. If you cannot determine the cause of failure, contact the wheel manufacturer.

SHUTDOWN

1. Move the hydraulic system control valve to the "OFF" position.
2. Disconnect the hydraulic hoses from the tool (first the input (supply) hose, then the output (return) hose).
3. Place dust plugs in the hose ends, couplers or tool ports, as applicable.
4. Wipe the tool thoroughly with a clean dry cloth.
5. Clean any foreign matter from the cut-off wheel surfaces.

OPERATION

PERIODIC MAINTENANCE

For maximum performance and reliability of the tool, periodically check the following components.

THRUST COLLAR AND INSIDE/OUTSIDE COLLAR INSPECTION

Periodically inspect the thrust collar for damage when you remove the cut-off wheel (refer to Cutoff Wheel Replacement).

1. Remove the key and thrust collar from the motor shaft.
2. Check the thrust collar for burrs. Remove burrs as required.
3. Check the threads on the clamping setscrew.
4. Inspect the collar bores and flanges.
5. Check for burrs. Remove burrs as required.
6. Check that the bearing surfaces are flat and run true when mounted on the motor shaft and thrust collar.

DRIVE-SHAFT SPEED CHECK

Check the speed of the motor output shaft at least every 100 hours of operation. The test should be performed only by a trained, experienced technician.

- Maintain a record of the speed checks.
- The maximum rated speed of the CO25 Hydraulic Cutoff Saw is 4500 rpm.
- The rated speed of the cutting wheel must be equal to, or greater than that of the tool to ensure the integrity of the wheel at maximum tool speed.
- Use the hydraulic power supply normally used with the cutoff saw when conducting this test.
- Excessive speed may be caused by excessive hydraulic fluid flow to the tool.

BEARING CHECK

Periodically inspect the bearings and associated parts for proper operation. A worn or damaged bearing can cause motor damage.

CARE AND STORAGE

Remove the cutoff wheel from the tool after use. Do not store or transport the saw with the wheel installed. Clean and inspect the wheel and tool before storing.

CUTOFF WHEELS

All abrasive cutoff wheels are breakable. Exercise care in handling and storage to prevent damage.

1. Clean used wheels to remove any dirt, debris, or grease. Dry thoroughly.
2. Inspect the wheel for chips, cracks, or other damage. For maximum tool performance, replace the wheel if it is worn or defective.
3. Store cutoff wheels on a flat surface of steel or similar rigid material.
4. If wheels are supplied with blotters attached, insert suitable separators between each wheel and the supporting surface to preserve flatness.
5. Do not store wheels where they will be exposed to high humidity, water or other liquids, excessive heat, or freezing temperatures.
6. Avoid temperatures low enough to cause condensation on the wheels if they are moved from storage to an area of higher temperature.
7. Wheels carried on emergency vehicles should be removed after use, and discarded or stored carefully (steps 1 and 2).

TOOL

1. Clean the tool to remove any dirt, debris, or grease. Dry with compressed air or clean dry cloths.
2. Replace any damaged or missing safety labels and tags before storing the tool. Otherwise, the tool might be improperly used by someone who is not familiar with the safety requirements.
3. Store the tool in a clean, dry place.

OPERATION

CUTOFF WHEEL REPLACEMENT

1. Move the hydraulic system control valve to the Off position.
2. Disconnect the hydraulic hoses from the tool (first the input (supply) hose, then the output (return) hose).
3. Install the inside collar and blotter, rotate the collar to align the slot in the collar with the pin on the thrust collar.
4. The maximum rated speed of the hydraulic cutoff saw is 4500 rpm. Never install a cutoff wheel that is not rated equal to or greater than that of the tool to ensure the integrity of the wheel at the maximum tool speed.
5. Prior to installing the wheel, inspect it for chips, cracks or other damage and replace if damaged.
6. Install the outside blotter and collar, rotate the collar so that the flat on the motor shaft aligns with the flat on the outside collar.
7. Install the wheel nut using a wrench while gripping the cutoff wheel. Tighten securely.

COLD WEATHER OPERATION

Before using the tool in cold weather, preheat the hydraulic fluid with the power unit operating at a low speed. The oil should be at or above 50°F (10°C) with a viscosity of 400 SSU (82 cs) before operating the tool.

EQUIPMENT PROTECTION & CARE

NOTICE

In addition to the Safety Precautions in this manual, observe the following for equipment protection and care.

- Make sure all couplers are wiped clean before connection.
- The hydraulic circuit control valve must be in the “OFF” position when coupling or uncoupling hydraulic tools. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Always store the tool in a clean dry space, safe from damage or pilferage.
- Make sure the circuit PRESSURE hose (with male quick disconnect) is connected to the “IN” port. The circuit RETURN hose (with female quick disconnect) is connected to the opposite port. Do not reverse circuit flow. This can cause damage to internal seals.
- Always replace hoses, couplings and other parts with replacement parts recommended by Stanley Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.
- Do not exceed the rated flow (see Specifications) in this manual for correct flow rate and model number. Rapid failure of the internal seals may result.
- Always keep critical tool markings, such as warning stickers and tags legible.
- Tool repair should be performed by experienced personnel only.
- Make certain that the recommended relief valves are installed in the pressure side of the system.
- Do not use the tool for applications for which it was not intended.

TROUBLESHOOTING

If symptoms of poor performance develop, the following chart can be used as a guide to correct the problem. When diagnosing faults in operation of the wrench, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the tool as listed in the following table. Use a flow meter known to be accurate. Check the flow with the hydraulic fluid temperature at least 80° F/27° C.

PROBLEM	CAUSE	SOLUTION
Tool does not operate.	Hydraulic control valve OFF.	Turn the hydraulic system control valve ON.
	Hydraulic hoses not connected properly.	Make sure the hoses are connected and the couplers are tight.
	Hydraulic system not functioning.	Check power unit for correct flow and pressure.
	Couplers or hoses blocked.	Remove obstruction.
	Mechanical failure.	Disassemble tool and inspect for damage.
Tool operates in reverse.	Hoses connected to wrong ports on tool.	Connect input (supply) line to IN port and connect output (return) line to OUT port.
Oil leakage between motor housing and ON/OFF valve block or motor.	Oil tube o-ring failure.	Replace o-ring.
	Motor face seal failure.	Replace seal.
Trigger difficult to operate.	Hoses connected to wrong ports on tool.	Connect input (supply) line to IN port and connect output (return) line to OUT port.
	Excessive back-pressure.	If back pressure is greater than 250 psi/17 bar, correct the return line obstruction or restriction.
Saw cuts too slowly.	Wrong cut-off wheel for work material.	Use correct wheel.
	Insufficient oil flow.	Adjust oil flow to 7-9 gpm/26-34 lpm.
	Relief valve setting too low.	Adjust relief valve to 2100-2250 psi/145-155 bar.

SPECIFICATIONS

Wheel Capacity	14-inch/15.6 cm
Weight	20 lbs/9 kg
Overall Length	21-inch/53 cm
Width	11-inch/28 cm
Pressure Range	1500-2000 psi/105-140 bar
Flow Range	7-9 gpm/26-34 lpm
Optimum Flow	8 gpm/30 lpm
System Type	Open Center, HTMA Type II
Porting	8 SAE O-Ring
Connect Size and Type	3/8-inch Male Pipe Adapter
Rotation RPM	4500

SOUND POWER AND VIBRATION DECLARATION

Measured A-weighted sound power level, Lwa (ref. 1pW) in decibels	109.4 dBA
Uncertainty, Kwa, in decibels	3 dBA
Measured A-weighted sound pressure level, Lpa (ref. 20 µPa) at operator's position, in decibels	101.5 dBA
Uncertainty, Kpa, in decibels	3 dBA
Values determined according to noise test code given in ISO 15744, using the basic standard ISO3744 NOTE- The sum of a measured noise emission value and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements.	
Declared vibration emission value in accordance with EN 12096	
Measured vibration emmission value: a	5.9 m/sec ²
Uncertainty: K	1.0 m/sec ²
Values determined according to ISO 8662-1, ISO 5349-1,2	

ACCESSORIES

DESCRIPTION	PART NUMBER
14-inch Abrasive Wheel for Metal, 1-inch Arbor	02691
14-inch Abrasive Wheel for Masonry, 1-inch Arbor.....	02692
Water Attachment	33228
Slab Saw Cart	33281
Water Tank Kit for P/N 33281	33474
Handle Extension Kit	34175
Diamond Blade, 14-inch Dry Cut	62358

SERVICE

GENERAL SERVICE REQUIREMENTS

Do not disassemble the tool unless an internal problem has been identified. The tool may not be the cause of the malfunction. Refer to the Troubleshooting Section of this manual.

Disassemble the tool only to the extent necessary to replace a defective part.

Do not put the tool back in service until the source of the problem has been identified and repaired. If not corrected, the original problem may cause excessive wear or tool failure.

NOTE:

When servicing the tool, keep your work surface clean. Do not allow dirt or grit to contaminate internal parts of the tool.

TOOLS, PARTS AND MATERIALS

- basic tools such as screwdrivers and hammer
- combination and hex wrenches
- punches for driving out roll pins
- seal kit
- clean grease or O-ring lubricant
- degreasing solvent
- clean, dry lint-free cloths

HYDRAULIC SYSTEM CONNECTIONS

If the hydraulic hoses are connected to the tool:

- Turn the hydraulic system control valve OFF.
- Disconnect first the hydraulic input (supply) hose, then the output (return) hose.
- Insert plugs in each hose to prevent contamination of the hydraulic circuit and interior of the valve handle assembly.

CLEANING

Clean any dirt, debris, or grease from the tool before removing any parts. Keep the work surface clean to avoid contaminating the interior of the tool.

Before reassembly, remove and discard any exposed O-rings. Do not install any parts in the tool until they have been cleaned.

1. Clean all parts with cleaning solvent, making sure the area is well ventilated.

2. Blow the parts dry with compressed air or wipe with clean, lint-free cloths.

PERIODIC MAINTENANCE

For maximum performance and reliability of the tool, periodically check the following components.

THRUST COLLAR AND INSIDE/OUTSIDE COLLAR INSPECTION

Periodically inspect the thrust collar for damage when you remove the cut-off wheel (refer to Cutoff Wheel Replacement).

1. Remove the key and thrust collar from the motor shaft.
2. Check the thrust collar for burrs. Remove burrs as required.
3. Check the threads on the clamping setscrew.
4. Inspect the collar bores and flanges.
5. Check for burrs. Remove burrs as required.
6. Check that the bearing surfaces are flat and run true when mounted on the motor shaft and thrust collar.

DRIVE-SHAFT SPEED CHECK

Check the speed of the motor output shaft at least every 100 hours of operation. The test should be performed only by a trained, experienced technician.

- Maintain a record of the speed checks.
- The maximum rated speed of the CO25 Hydraulic Cutoff Saw is 4500 rpm.
- The rated speed of the cutting wheel must be equal to, or greater than that of the tool to ensure the integrity of the wheel at maximum tool speed.
- Use the hydraulic power supply normally used with the cutoff saw when conducting this test.
- Excessive speed may be caused by excessive hydraulic fluid flow to the tool.

SERVICE

BEARING CHECK

Periodically inspect the bearings and associated parts for proper operation. A worn or damaged bearing can cause motor damage.

ACCESSORY INSTALLATION

An optional handle extension can be installed on the CO25 cutoff saw between the motor mount and the valve handle assembly.

1. Remove the wheel guard by loosening and removing the wheel nut using a box-end wrench while gripping the cutoff wheel.
2. Remove the outside collar, wheel and inside collar by removing the beveled retaining ring and swingover nut assembly securing the wheel guard. Remove the guard.
3. Remove the four hex-socket capscrews securing the valve handle assembly to the motor housing. Separate the two assemblies.
4. Carefully remove the two short oil tubes from the motor housing or valve handle. If you plan to remove the extension at a later date and restore the cutoff saw to its original configuration:

Note:

Take care not to damage the sealing surfaces of the tubes.

5. Clean, wrap, mark and store the oil tubes in a safe place.
6. Install the extension on the motor housing by aligning the holes in the extension with those in the motor housing.
7. Install and tighten the four hex-socket capscrews from the motor housing side of the joint.
8. Install the two long oil tubes in the extension by lubricating and installing an O-ring on each end of the two long oil tubes included in the extension kit.
9. Carefully insert the tubes in the large holes in the extension until they bottom out inside the motor.
10. Install the valve handle assembly on the extension by aligning the oil tubes protruding from the extension with the holes in the valve handle assembly.

11. Carefully slide the valve handle assembly onto the oil tubes until the handle mates with the extension.
12. Install and tighten four hex-socket capscrews from the extension side of the joint.
13. Remove the tubular handlebar from the cutoff saw by loosening and removing the hex-socket capscrews from the top and bottom of the handlebar next to the wheel guard.
14. Slide the handlebar horizontally off the end of the motor assembly.
15. Install the new assist handle by using two capscrews and the handlebar retainers removed from the original handle.
16. Fasten the vertical strut of the assist handle to the extension using the hardware included in the extension kit. On models using a 1/4-inch fastener, install the spacer between the strut and the extension.
17. Remove the handle strut assembly from the cut-off saw as desired.

SAW CART INSTALLATION AND REMOVAL

The CO25 cut-off saw can be installed on a Stanley saw cart to provide a stable platform for slab cutting. The saw can be easily removed again for handheld operation. After the original installation, attaching or removing the saw from the cart requires only a few steps.

INSTALLATION

Steps 1 through 4 are required only for the initial installation on a new cart.

1. Install the handlebar assembly by inserting the handlebar assembly in the tube at the top of the cart. Insert with the control lever on the left side as you stand behind the cart.
2. Center the assembly and secure with the 3/8-inch handlebar set bolt and locking nut.
3. Install the foam grip on the left end of the handlebar using soapy water. The right grip is installed at the factory.
4. Connect the control cable to the control lever by inserting the cable head into the lever housing and turn to lock in place and align the cable in the slotted conduit retainer on the control lever assembly and tighten the thumb nut.

SERVICE

REMOVING HANDLEBAR FROM THE CUT-OFF SAW

1. Loosen and remove the hex-socket capscrews from the top and bottom of the handlebar next to the wheel guard.
2. Slide the handle horizontally off the end of the motor assembly.

Note:

Included with the saw cart is a tubular handle. This handle replaces the existing tubular handle on the saw so that the operator may easily switch from cart use to hand use.

INSTALL CUTOFF SAW ON THE SAW CART

1. Position the saw on the cart with the round motor body inserted into the cart housing. The cutting blade must be perpendicular to the floor and the guard positioned parallel to the cart frame.
2. Install and tighten the cutting-head collar bolt and nut through the clamp on the cart.
3. Install the hairpin cotter on the saw and the middle bracket on the cart to secure the saw's valve handle assembly to the cart.
4. Adjust the cable jacket travel. Adjust the cable stop set-screw on the bottom of the cable until the slack is taken out of the cable.
5. Connect the water-supply hose to the wheel guard.

REMOVE CUTOFF SAW FROM SAW CART

The tool can easily be converted back to its original handheld configuration.

1. Remove the water hose assembly, as required.
2. Release the saw from the cart by removing the hairpin cotter and cutting-head collar nut and bolt.

DISASSEMBLY

FLOW CONTROL REPLACEMENT

The tamper-proof flow control valve in the handle is preset at the factory and is not field serviceable. If the drive-shaft

speed exceeds the 4500 rpm maximum limit, replace the flow control. Refer to the Periodic Maintenance procedure earlier in this section for the drive-shaft speed test.

CUTOFF WHEEL REMOVAL

1. Loosen and remove the wheel nut using a wrench while gripping the cutoff wheel.
2. Remove the outside collar and blotter.
3. Remove the wheel.
4. Remove the inside blotter and collar.

Note:

Periodically inspect the thrust collar before replacing the wheel.

WHEEL GUARD REMOVAL

The cutoff wheel and collars must first be removed by following the steps above.

1. Remove the beveled retaining ring from the motor pilot diameter inside the wheel guard using snap ring pliers.
2. Unscrew and remove the swingover nut and washer securing the wheel guard.
3. Remove the guard.

SAFETY CATCH REMOVAL

1. Drive the roll pin out of the valve handle assembly using a 3/16-inch (4 mm) punch.
2. Remove the safety catch and spring.

TRIGGER REMOVAL

The cut-off wheel, wheel guard and safety catch must be removed to provide access to the roll pin in the valve handle.

1. Drive the roll pin out of the valve handle assembly using a 1/4-inch (6 mm) punch.
2. Remove the trigger and spacer.

ON/OFF VALVE REMOVAL

The cutoff wheel, wheel guard, safety catch and trigger must be removed before valve removal.

SERVICE

1. Unscrew and remove the valve cap from the top of the valve handle assembly.
2. Lift out the valve spool.
3. Unscrew and remove the plug from the bottom of the valve handle assembly. Carefully remove the spring and poppet (blade brake) from the spool bore if they do not come out with the plug.

THRUST COLLAR REMOVAL

1. Loosen the setscrew securing the thrust collar to the motor shaft, using a hex wrench.
2. Remove the key and thrust collar from the motor shaft.

OIL TUBE REMOVAL

The valve handle assembly must be removed from the motor housing to access the oil tubes.

1. Remove four hex-socket capscrews securing the valve handle assembly to the motor housing. Carefully separate the two assemblies by pulling straight apart. The oil tubes may be damaged if you twist or pull at an angle.
2. Carefully remove the two oil tubes from the motor housing. Make sure you do not damage the sealing surfaces on the tubes or motor housing.

MOTOR REMOVAL

Remove the wheel, thrust collar, valve handle, and oil tubes.

IMPORTANT

Do not remove the bearing housing from the motor housing unless the oil tubes are removed.

1. Remove two flat-head machine screws securing the bearing housing to the motor housing.
2. Remove the motor from the motor housing.

MOTOR DISASSEMBLY

Remove the motor from the motor housing.

1. Remove the tubular handlebar from the cutoff saw by loosening and removing the hex-socket capscrews from the top and bottom of the handlebar next to the wheel guard.

2. Slide the handle horizontally off the end of the motor assembly.
3. Remove the handlebar retainers from the ends of the handle.
4. Remove eight capscrews securing the gear housing to the bearing housing.
3. Carefully separate the gear and bearing housings using a flat-blade screwdriver in the groove in the split between the housings to pry the parts apart.

IMPORTANT

Pry only in the groove, not on the mating surfaces.
Be sure not to scratch the mating surfaces.

4. Separate the parts in a straight line to prevent damaging any internal components.
5. Remove the two gears, needle roller, and idler shaft.
6. Remove the large face seal O-ring. Be careful not to damage the groove or surrounding surface.
7. Remove the motor shaft from the bearing housing:
8. Be careful to protect the surfaces on the bearing housing from damage while doing the rest of this step.
9. Remove the large retaining ring securing the bearing (on the wheel guard side of the motor housing).
10. Tap lightly on the small end of the motor shaft (gear side) with a soft-faced hammer to remove the shaft and bearing from the bearing housing. Be careful not to strike the shaft from an angle or otherwise bend it.

IMPORTANT

Do not remove the bearing from the motor shaft unless it must be replaced. It may be damaged during removal.

11. To remove a damaged bearing from the motor shaft, support the bearing's outer race with an appropriate tube or pipe.

Press the threaded end of the motor shaft out of the bearing. Be careful not to bend the shaft.

Discard the bearing.

SERVICE

12. Remove the seals from the motor-shaft bore in the bearing housing using Method A or B.

METHOD A:

Remove the retaining ring at the bottom of the bore.

Use the appropriate O-ring service tool to carefully pry the seal gland out of the bore.

Note:

Do not damage the seal surfaces. Note the seal orientation.

Remove the O-ring from the outside of the seal gland and then remove the quad ring from inside the seal gland.

METHOD B:

Insert a rubber-tipped air nozzle in the gear side of the bore.

Partially install the small end of the motor shaft through the shaft seal.

Plug the seal vent holes on the face of the bearing housing and apply air pressure to force the seal gland out and onto the shaft.

PREPARE PARTS FOR ASSEMBLY

Before the tool can be reassembled, all parts must be cleaned, inspected, and repaired or replaced as needed. Remove and discard all seals and O-rings.

CLEANING

1. Clean all parts with degreasing solvent, making sure the area is well ventilated.

2. Blow the parts dry with compressed air to thoroughly clean oil passage ways, or wipe with clean, lint-free cloths.

INSPECTION

Inspect all parts for wear or damage; replace as needed. Parts with special inspection requirements are listed below.

IMPORTANT

The tool parts are carefully machined at the factory to critical tolerances. Do not attempt to refurbish the parts.

To determine the extent of wear or damage to any part, compare the surface to the examples in the Stanley Refurbishing Guide (P/N 28431). The kit includes a surface-finish comparator and instructions for refurbishing parts.

BEARING HOUSING

Inspect the inner surface and bores of the front bearing housing. The bore for the seal gland should be smooth to prevent oil leakage. If it is nicked or scratched, replace the bearing housing.

The surface near the gears should show two interconnecting polished circles without a step and should not be rough or grooved. Replace the housing if it is damaged or the motor appears to slow down excessively or be low on power.

Shake the bearing housing. The two seal check balls should rattle. If they do not, the check valves are probably plugged with contaminants and the bearing housing should be replaced.

GEAR HOUSING

Inspect the inner surface and bores.

The chamber bores and bottoms around the shaft bushings should appear smooth and polished. If they are rough or grooved, replace the gear housing.

The flat surface around the chamber and bolt holes should be flat and free of nicks or burrs that could cause misalignment or leaks. If they are not smooth, replace the gear housing.

BUSHINGS

Inspect the bushings for wear or discoloration.

The inside of the bushing should be gray with some bronze showing through. If a significant amount of yellow-bronze shows, replace the bushing.

Inspect the motor shaft for corresponding wear. Replace as required.

GEARS

Check the gears for wear or damage.

Both gears should have square tooth ends, straight tips without nicks, and a smooth, even polish on the teeth and end faces. Replace both gears if either one is worn or damaged.

SERVICE

Check for cracks between the drive gear keyway and gear tooth root. Replace the gear if one or more cracks are present.

SHAFTS

The surface of the motor shaft where the bearing and seal are mounted must be smooth.

Grooves, roughness or a reduced diameter indicate fluid contamination or damaged bushings. Abrasive particles can become imbedded in the bushings and grind into the hardened shaft.

If this abnormal shaft wear occurs (in excess of normal polishing) both the shaft and associated bushings must be replaced.

Check the hydraulic system filter and hydraulic fluid for contamination. Operating conditions may required changing from a 25-micron filter to an oversize 10-micron filter.

ASSEMBLY

Always replace any seals or O-rings that are disturbed during disassembly of a part. When installing the new seals, lubricate them and make sure they seat all the way around the groove in the part. All the required seals are in the seal kit.

Refer to the parts illustration in this manual for the location of parts.

MOTOR ASSEMBLY

1. Install the seal gland in the motor-shaft bore in the bearing housing.
2. Lubricate and install the quad ring in the inside groove in the seal gland.
3. Lubricate and install a new O-ring on the outside of the seal gland.
4. Carefully insert the narrow end of the seal gland in the bearing housing (in the wheel guard end of the motor-shaft bore).
5. Install the retaining ring to hold the seal gland in place.
6. Install a new bearing on the motor shaft if the old bearing was removed during disassembly.

7. Support the new bearing's inner race and press the threaded end of the motor shaft through the center of the bearing until it bottoms out on the shaft's flange.

8. Install the motor shaft and bearing in the bearing housing. Place the bearing housing on a smooth clean arbor press surface (protected from damage), with the large bearing bore facing up. Position the piece so that a clearance hole exists for the insertion of the motor shaft.

9. Apply heavy grease to the motor shaft and bushing and fill the keyway on the shaft.

10. Insert the motor shaft through the seal gland in the motor shaft bore.

11. Use a sleeve or socket with a diameter equal to the bearing OD (or shaft pusher P/N 00850) to press the bearing assembly into place.

Note:

Press only on the bearing outer race.

12. Install the bearing retaining ring to secure the motor shaft assembly in place and then install the drive gear on the motor shaft.

13. Install the needle roller in the keyway in the motor shaft. Use a small amount of grease to keep it in place.

14. Slide the drive gear onto the shaft over the needle roller.

15. Install the idler shaft and gear by inserting the idler shaft in the second bore in the bearing housing. Slide the idler onto the idler shaft.

16. Apply grease to the face seal O-ring groove. Install the O-ring in the groove.

17. Install the gear housing on the bearing housing.

IMPORTANT

Do not force the housings together.

Note:

If they do not go together easily, they are not properly aligned or one or more parts are not correctly installed.

18. Make sure the two alignment dowel pins are in the opposite holes in the face of the bearing housing. Carefully align the dowel and bolt holes in the bearing and gear housings. The hole pattern is designed so the housings can be joined only one way.

SERVICE

19. Slowly slide the gear housing over the gears until it contacts the bearing housing.

20. Turn the motor shaft manually to check for free rotation. If it does not turn easily, separate the housings and find the cause of the binding.

21. Install eight capscrews. Tighten finger tight.

22. Recheck the shaft rotation. When the shaft rotates easily, tighten the capscrews.

23. Install the motor in the motor housing by making sure the oil tubes are removed from the motor housing.

24. Insert the motor into the motor housing and secure with two flat-head machine screws.

25. When new parts are installed, it may be necessary to "break-in" the motor. After the saw has been reassembled without the guard, the motor may be broken in as follows:

Connect the cutoff saw to a hydraulic power supply. Start the saw and check for smooth operation.

If break-in is required, rotate the shaft with a wrench, with and against pressure until the motor starts and runs freely. The ON/OFF valve must be held in the ON position.

THRUST COLLAR INSTALLATION

1. Insert the key into the groove on the motor shaft. Use a small amount of grease to hold it in place.

2. Push the thrust collar onto the motor shaft, aligning the keyway with the key in the shaft.

3. Tighten the setscrew using a hex wrench.

OIL TUBE AND VALVE HANDLE ASSEMBLY

If the oil tubes and/or valve handle assembly were removed, lubricate and install a new O-ring on each end of the two oil tubes.

2. Carefully insert the oil tubes in the motor housing until they bottom out in the motor. Do not damage the sealing surfaces on the tubes or motor housing.

3. Install the valve handle assembly on the motor housing by aligning the holes in the valve handle assembly with those in the motor housing.

4. Carefully slide the valve handle assembly over the oil tubes until it meets the motor housing and secure in place with four hex-socket capscrews.

ON/OFF VALVE INSTALLATION

If the valve in the valve handle assembly was removed, lubricate and install new O-rings on the plug and valve cap.

1. Thread the valve cap assembly into the top of the valve handle assembly.

2. Insert the poppet and spring in the bottom of the valve spool. Insert the valve spool through the bottom of the valve handle. Secure in place with the threaded plug.

TRIGGER INSTALLATION

If the trigger was removed from the valve handle, place the trigger and spacer between the upper set of holes in the valve handle.

1. Drive a 1/4-inch (6 mm) roll pin through the holes using a punch and hammer.

SAFETY CATCH INSTALLATION

If the safety catch was removed from the valve handle, place the torsion spring on the boss of the safety catch with the spring tab on top of, and facing, the back of the catch.

1. Place the safety catch in the valve handle and align the holes using a 3/16-inch (4 mm) punch.

2. Drive a 3/16-inch (4.8 mm) roll pin through the holes using a punch and hammer.

3. Push down on the spring tab until it snaps in place under the safety catch.

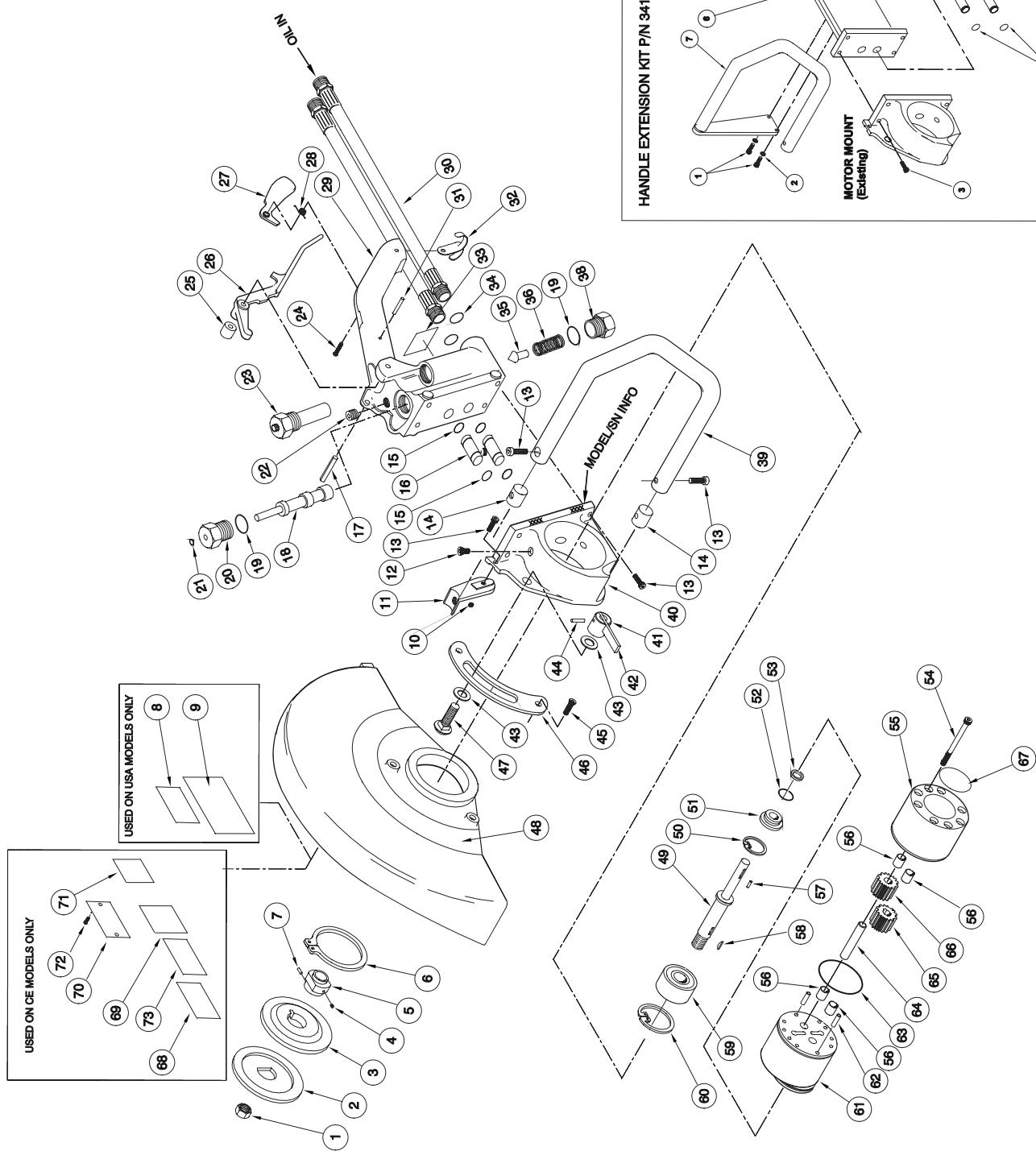
WHEEL GUARD

If the wheel guard was removed, install a washer on the guard-clamp carriage bolt and align the bolt with the corresponding hole in the motor housing.

1. Slide the center hole in the guard onto the motor pilot diameter and secure with the beveled retaining ring. Make sure the beveled edge of the retaining ring is facing outward.

2. Place the remaining washer and the swingover nut on the carriage bolt and tighten only until secure.

CO25 PARTS ILLUSTRATION



CO25 PARTS LIST

Item No.	Part No.	Qty	Description
1	01714	1	Jam Nut, CCW
	03012	1	Jame Nut, CW
2	31028	1	Outer Collar
3	04876	1	Inside Collar
4	00720	1	Set Screw
5	04673	1	Thrust Collar
6	03013	1	Retaining Ring
7	00563	1	Roll Pin
8	05152	1	Stanley Sticker (USA Models Only)
9	05868	1	Caution Sticker (USA Models Only)
10	01420	1	Helicoil
11	20460	1	Handle Strut
12	03006	2	Capscrew
13	02688	8	Capscrew
14	02649	2	Handle Bar Retainer
15	00175	4	O-ring •
16	02912	2	Oil Tube
17	17681	1	Spring Pin
18	32026	1	Valve Spool (CCW Models Only)
	31138	1	Valve Spool (CW Models Only)
19	01604	2	O-ring •
20	02931	1	Valve Cap
21	00112	1	Quad Ring •
22	01219	1	Pipe Plug
23	25635	1	Flow Control
24	35963	1	Capscrew
25	02920	1	Spacer
26	22707	1	Trigger
27	22704	1	Safety Catch
28	22701	1	Torsion Spring
29	28552	1	Valve Handle Assy (Incl Item 22)
30	07226	2	Hose Assy (Incl Item 34)
31	03009	1	Roll Pin
32	02911	1	Hose Clip
33	03786	1	Caution Sticker (USA Models Only)
	11207	1	Circuit D Sticker (CE Models Only)
34	01605	2	O-ring • (Incl with Item 30)
35	31186	1	Poppet
36	02916	1	Compression Spring
37	—	-	NO ITEM
38	31137	1	Plug
39	02654	1	Handle Bar
40	02950	1	Motor Housing
41	03049	1	Swing Over Nut

Item No.	Part No.	Qty	Description
42	03048	1	Lever
43	01594	2	Washer
44	03047	1	Roll Pin
45	05071	2	Capscrew
46	32445	1	Guard Clamp
47	03025	1	Bolt
48	32436	1	Wheel Guard
	33084	1	Motor Assy, CCW (Incl Items 49-57, 59-66)
	33083	1	Motor Assy, CW (Incl Items 49-57, 59-66)
49	32047	1	Motor Shaft (CCW Models Only)
	32872	1	Motor Shaft (CW Models Only)
50	00170	1	Retaining Ring
51	30333	1	Seal Gland
52	350771	1	O-ring •
53	00214	1	Quad Ring •
54	00120	8	Capscrew
55	31849	1	Gear Hsg Assy
56	06316	4	Bushing
57	06881	1	Needle Roller
58	00772	1	Key
59	00148	1	Bearing
60	00166	1	Retaining Ring
61	30591	1	Bearing Hsg Assy
62	00713	2	Dowel Pin
63	00178	1	O-ring
64	06854	1	Idler Shaft
65	06853	1	Driver Gear
66	06855	1	Idler Gear
67	33206	1	Name Tag
68	28322	1	CE Sticker (CE Models Only)
69	28886	1	Composite Sticker (CE Models Only)
70	28811	1	Information Plaque (CE Models Only)
71	05153	1	Stanley Sticker (CE Models Only)
72	02004	2	Drive Screw
73	52539	1	Sound Power Level Decal
	24058	1	Coupler, Female (Not Shown)
	24059	1	Coupler, Male (Not Shown)
	24069	1	Coupler Set
	31845	1	SEAL KIT

WARRANTY

Stanley Hydraulic Tools (hereinafter called "Stanley"), subject to the exceptions contained below, warrants new hydraulic tools for a period of one year from the date of sale to the first retail purchaser, or for a period of 2 years from the shipping date from Stanley, whichever period expires first, to be free of defects in material and/or workmanship at the time of delivery, and will, at its option, repair or replace any tool or part of a tool, or new part, which is found upon examination by a Stanley authorized service outlet or by Stanley's factory in Milwaukie, Oregon to be DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP.

EXCEPTIONS FROM WARRANTY

FREIGHT COSTS: Freight costs to return parts to Stanley, if requested by Stanley for the purpose of evaluating a warranty claim for warranty credit, are covered under this policy if the claimed part or parts are approved for warranty credit. Freight costs for any part or parts which are not approved for warranty credit will be the responsibility of the individual.

SEALS & DIAPHRAGMS: Seals and diaphragms installed in new tools are warranted to be free of defects in material and/or workmanship for a period of 6 months after the date of first usage, or for a period of 2 years from the shipping date from Stanley, whichever period expires first.

CUTTING ACCESSORIES: Cutting accessories such as breaker tool bits are warranted to be free of defects in material and or workmanship at the time of delivery only.

ITEMS PRODUCED BY OTHER MANUFACTURERS: Components which are not manufactured by Stanley and are warranted by their respective manufacturers.

a. Costs incurred to remove a Stanley manufactured component in order to service an item manufactured by other manufacturers.

ALTERATIONS & MODIFICATIONS: Alterations or modifications to any tool or part. All obligations under this warranty shall be terminated if the new tool or part is altered or modified in any way.

NORMAL WEAR: any failure or performance deficiency attributable to normal wear and tear such as tool bushings, retaining pins, wear plates, bumpers, retaining rings and plugs, rubber bushings, recoil springs, etc.

INCIDENTAL/CONSEQUENTIAL DAMAGES: To the fullest extent permitted by applicable law, in no event will STANLEY be liable for any incidental, consequential or special damages and/or expenses.

FREIGHT DAMAGE: Damage caused by improper storage or freight handling.

LOSS TIME: Loss of operating time to the user while the tool(s) is out of service.

IMPROPER OPERATION: Any failure or performance deficiency attributable to a failure to follow the guidelines and/or procedures as outlined in the tool's operation and maintenance manual.

MAINTENANCE: Any failure or performance deficiency attributable to not maintaining the tool(s) in good operating condition as outlined in the Operation and Maintenance Manual.

HYDRAULIC PRESSURE & FLOW: Any failure or performance deficiency attributable to excess hydraulic pressure, excess hydraulic back-pressure, or excess hydraulic flow.

REPAIRS OR ALTERATIONS: Any failure or performance deficiency attributable to repairs by anyone which in Stanley's sole judgement caused or contributed to the failure or deficiency.

MIS-APPLICATION: Any failure or performance deficiency attributable to mis-application. "Mis-application" is defined as usage of products for which they were not originally intended or usage of products in such a manner which exposes them to abuse or accident, without first obtaining the written consent of Stanley.

WARRANTY REGISTRATION: STANLEY ASSUMES NO LIABILITY FOR WARRANTY CLAIMS SUBMITTED FOR WHICH NO TOOL REGISTRATION IS ON RECORD. In the event a warranty claim is submitted and no tool registration is on record, no warranty credit will be issued without first receiving documentation which proves the sale of the tool or the tools' first date of usage. The term "DOCUMENTATION" as used in this paragraph is defined as a bill of sale, or letter of intent from the first retail customer. A WARRANTY REGISTRATION FORM THAT IS NOT ALSO ON RECORD WITH STANLEY WILL NOT BE ACCEPTED AS "DOCUMENTATION".

NO ADDITIONAL WARRANTIES OR REPRESENTATIONS

This limited warranty and the obligation of Stanley thereunder is in lieu of all other warranties, expressed or implied including merchantability or fitness for a particular purpose except for that provided herein. There is no other warranty. This warranty gives the purchaser specific legal rights and other rights may be available which might vary depending upon applicable law.

STANLEY
®

Stanley Hydraulic Tools

3810 SE Naef Road
Milwaukie OR 97267-5698
503-659-5660
FAX 503-652-1780
www.stanley-hydraulic-tools.com